

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks.

Claims 20-24 have been cancelled without prejudice. Claim 1 has been amended as supported by the specification at page 13, lines 16-17. Claim 25 has been added as supported by the specification at page 13, lines 17-22.

The present application has been restricted to either claims 1-16 and 20-21 (Group I) or claims 22-24 (Group II) because of lack of unity of the invention. Applicants elect Group I, and non-elected claim 22-24 (Group II) have been canceled.

Claim 21 has been objected to because of informalities. Claim 21 has been canceled, and this objection is moot and should be withdrawn.

Claims 1-3, 5, 10, and 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073). Applicants respectfully traverse this rejection.

Claim 1 is directed to a method of manufacturing an analytical tool and recites a reagent member forming process for providing a base plate with a reagent member that includes a stack of two or more reagent layers separated by an intervening water-soluble separation layer.

Rieger is directed to reaction zones for colorimetrically detecting gaseous toxic substances and discloses the reaction zones having indicator materials, particularly color indicators that detect the toxic substances (see coln. 1, lines 6-14 and coln. 2, lines 10-18). The reference further discloses an embodiment having three component regions, which are layered, and that between the first layer and second layer, an intermediate layer of silica gel is inserted (see Fig. 10 and coln. 9, line 59 - coln. 10, line 6). Silica gel absorbs moisture, but does not dissolve in water generally. In contrast, the intervening

separation layer recited in claim 1 is water-soluble. When aqueous sample liquid, for example a blood or urine sample, is applied to the reagent layers of claim 1, the intervening water-soluble separation layer can dissolve in the sample liquid, and the reagents in the two or more reagent layers, particularly the reagents in the lower layers, can contact and react with the sample liquid promptly. Rieger does not recognize these advantageous properties of the analytical tool provided by the method of claim 1. Accordingly, claim 1 is distinguished from Rieger.

Kloepfer, which does not disclose a stack of two or more reagent layers and the intervening separation layer placed between the reagent layers, does not remedy the deficiencies of Rieger.

Yamamoto discloses two or more laminated layers including ink but fails to disclose an intervening separation layer placed between the two or more ink layers and further fails to disclose that the intervening separation layer is a water-soluble layer, as claim 1 recites (see Figs. 5B-5C and coln. 6, lines 47-62). Thus, Yamamoto also fails to remedy the deficiencies of Rieger.

Accordingly, claim 1 and its dependent claims 2-3, 5, 10, and 16 are distinguished from Rieger in view of Kloepfer and Yamamoto, and this rejection should be withdrawn.

Claim 4 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepfer et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073), and further in view of Obermayer (U.S. Patent No. 4,258,000). Applicants respectfully traverse this rejection.

Claim 4, which depends from claim 1, is distinguished from Rieger in view of Kloepfer and Yamamoto for at least the same reasons as discussed for claim 1 above.

Obermayer discloses a toxic-monitoring material, which can detect the toxic substance by change of a color indicator throughout a depth of a material (see abstract), and the reference does not disclose a stack of two or more reagent layers. Obermayer, however, fails to disclose the intervening separation layer between the reagent layers and that the intervening separation layer is a water-soluble layer, as claim 4 requires. Accordingly, Obermayer does not remedy the deficiencies of Rieger, Kloepfer, and Yamamoto, and this rejection should be withdrawn.

Claims 6-7 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073), and further in view of Buechler (U.S. Patent No. 6,113,855). Applicants respectfully traverse this rejection.

Claims 6 and 7, which ultimately depend from claim 1, are distinguished from Rieger in view of Kloepper and Yamamoto for at least the same reasons as discussed for claim 1 above.

Buechler discloses an assay device structure in which fluid flows from one region to another (see abstract) and is silent about a device including a reagent layer. Buechler does not remedy the deficiencies of Rieger, Kloepper, and Yamamoto, and this rejection should be withdrawn.

Claims 8-9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073), and further in view of May (U.S. Patent No. 5,089,232). Applicants respectfully traverse this rejection.

Claims 8 and 9, which ultimately depend from claim 1, are distinguished from Rieger in view of Kloepper and Yamamoto for at least the same reasons as discussed for claim 1 above.

May discloses channels coated with an indicator or with a reagent and further discloses that silica gel is applied to indicator carriers (see coln. 3, lines 3-9). May, however, fails to disclose a stack of two or more reagent layers and thus fails to disclose the intervening water-soluble separation layer placed between the reagent layers required by claims 8 and 9. Accordingly, May does not remedy the deficiencies of Rieger, Kloepper, and Yamamoto, and this rejection should be withdrawn.

Claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073), and further in view of

Tisone (U.S. Patent Application Publication No. 2002/0001675). Applicants respectfully traverse this rejection.

Claim 11, which ultimately depends from claim 1, is distinguished from Rieger in view of Kloepper and Yamamoto for at least the same reasons as discussed for claim 1 above.

Tisone fails to disclose a stack of two or more reagent layers and the intervening water-soluble separation layer placed between the two or more reagent layers required by claim 11. Accordingly, Tisone does not remedy the deficiencies of Rieger, Kloepper, and Yamamoto, and this rejection should be withdrawn.

Claim 12 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073), and further in view of Sasaki (U.S. Patent Application Publication No. 2001/0055814). Applicants respectfully traverse this rejection.

Claim 12, which depends from claim 1, is distinguished from Rieger in view of Kloepper and Yamamoto for at least the same reasons as discussed for claim 1 above.

Sasaki, which fails to disclose a stack of two or more reagent layers and the intervening water-soluble separation layer placed between the two or more reagent layers required by claim 12, does not remedy the deficiencies of Rieger, Kloepper, and Yamamoto, and accordingly, this rejection should be withdrawn.

Claims 13-15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Rieger et al. (U.S. Patent No. 5,415,838) in view of Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073), and further in view of Hashimoto et al. (U.S. Patent Application Publication No. 2003/0083203). Applicants respectfully traverse this rejection.

Claims 13-15, which ultimately depend from claim 1, are distinguished from Rieger in view of Kloepper and Yamamoto for at least the same reasons as discussed for claim 1 above.

Hashimoto discloses a film pattern forming method and further discloses that a first dry film formed with a first droplet by dropping and drying may contact with a second droplet, which forms a second dry film (see Fig. 3 and paras. [0118]-[0119] on page 7 and [0123] on page 8) but fails to disclose an intervening separation layer placed between the first and second dry films and that the intervening separation layer is water-soluble as required by claims 13-15. Accordingly, Hashimoto does not remedy the deficiencies of Rieger, Kloepper, and Yamamoto, and accordingly, this rejection should be withdrawn.

Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Deeg et al. (U.S. Patent No. 5,378,638) in view of Cottingham (U.S. Patent No. 5,948,673).

Claim 20 has been canceled. Accordingly, this rejection is moot and should be withdrawn. Applicants do not concede the correctness of the rejection.

Claim 21 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Cottingham (U.S. Patent No. 5,639,428) in view of Goerlach-Graw et al. (U.S. Patent No. 5,424,220) and Kloepper et al. (U.S. Patent No. 6,696,240) and Yamamoto et al. (U.S. Patent No. 6,846,073). Claim 21 has been canceled. Accordingly, this rejection is moot and should be withdrawn. Applicants do not concede the correctness of the rejection.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



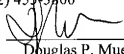
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Respectfully submitted,

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